ABSTRACT OF THE DISCLOSURE

[0046]   Medical imaging uses cyclical motion analysis. Phase and/or amplitude analysis of variation for spatial locations in a sequence of images over one or more heart cycles is performed. For phase analysis, selected phase information is cyclically isolated as a function of the heart cycle. For example, a sequence of three images is associated with three different times during the heart cycle. In one image, phases over one range are highlighted. In subsequent images, phases over different ranges are highlighted. By showing the sequence of images in a loop with the shifting phase throughout the sequence, wall contractions are easily visualized. For amplitude analysis, information associated with a selected frequency band, such as the constant and fundamental frequency bands, are isolated. Images are then generated in response to the isolated information. The images have reduced speckle content due to the lack of higher order frequency information. Some higher order frequency information may be allowed to remain or added to avoid motion blurring. The isolated information also more likely has well defined borders or edges as compared to the information with the full bandwidth.